

REMARKS

In the Office Action dated December 1, 2001, the Examiner: objected to the specification; rejected claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,348,796 to Smallegan ("Smallegan"); and rejected claims 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Smallegan in view of U.S. Patent No. 4,998,659 to Goodsmith et al. ("Goodsmith").

By this Amendment, Applicant cancels claims 4-5, without prejudice or disclaimer, amends claims 1-2, and adds new claims 7-8. Claims 1-3, and 6-8 are currently pending.

Objection to the Specification

In the Office Action, the Examiner objected to the specification. In particular, the Examiner asserted that the "reference number '2' in line 10 should read --4--." The Examiner failed to identify the paragraph number or page of this typographical error. Upon review, Applicant believes the typographical error to be in the paragraph beginning on page 3, line 12. If, however, the Examiner found a different typographical error, Applicant respectfully requests the full identification of such error, so it too can be corrected. By this Amendment, Applicant has amended the specification at the noted location as suggested by the Examiner. Reconsideration and withdrawal of the objection is respectfully requested.

Rejection of claims 1-3

In the Office Action dated December 1, 2001, the Examiner rejected claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Smallegan. Applicant respectfully traverses this rejection.

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Smallegan appears to disclose a pierce nut installation apparatus. Smallegan's apparatus uses a two stage process to install pierce nuts. In the first stage, the die 102 is moved up towards the nut 60a, which is held captive on a magnetic nut anchor 84 (See Smallegan at Fig. 4). The first stage moves a piston using air line pressure to create a pressure of about 500 to 800 psi. In the second stage, the piston is hydraulically augmented to create a die pressure of 4-8 tons (See Smallegan at col. 5, lines 29-45).

The second stage is initiated automatically using a sensing circuit. However, Smallegan discloses that the sensing circuit may be eliminated such that an operator manually actuates each stage (See Smallegan, col. 7, lines 10-11). For example, the operator may press a button on a control panel to actuate each stage of the pierce nut installation apparatus. However, even if the user manually actuates each stage, Smallegan's apparatus still relies upon air or hydraulic pressure to move the die and piston.

In contrast, claim 1, as amended, recites, a feed heed wherein means is provided to manually reciprocate the pressing die independently of the press. Applicant respectfully submits that manually reciprocating the pressing die is not the same as manually actuating a stage. Accordingly, a user manually actuating a stage (as disclosed by Smallegan) is not the same as a feed heed wherein means is provided to manually reciprocate the pressing die independently of the press (as recited by claim 1). Therefore, Smallegan fails to disclose, teach, or suggest all of the features recited by claim 1.

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Claims 2-3 depend from independent claim 1 and, thus, are allowable for at least their dependence from allowable claim 1, as well as their additional recitations.

Applicant respectfully requests reconsideration and withdrawal of the rejection.

Rejection of claims 4-6

In the Office Action, the Examiner rejected claims 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Smallegan in view of Goodsmith. Applicant respectfully traverses this rejection.

By this Amendment, Applicant cancels claims 4 and 5, without prejudice or disclaimer. Thus, the rejection of claims 4 and 5 is now moot.

Smallegan discloses a pierce nut installation apparatus having a piston rod threaded into a feed head. The feed head 36 includes a pawl 38, which is pivotally connected to the head at 40, and resiliently biased by spring 42 into a nut bore. Extension of the piston rod 34 feeds nuts into the nut passage 44. When the piston rod 34 and feed head 36 are retracted, the pawl 38 is biased into the head 36, out of engagement with the nuts, permitting return of the head 36 for feeding further nuts (See Smallegan at col. 5, lines 1-14).

Furthermore, Smallegan discloses that the pierce nut installation apparatus provides its own source of power (See Smallegan at col. 3, lines 25-26). In particular, Smallegan's pierce nut installation apparatus relies upon air and hydraulic power, not electricity. Therefore, Smallegan discloses an apparatus, which uses air and hydraulic power not electrical power.

In contrast, claim 6 recites, a feed head, wherein the delivery tube and electrical connector are integrated. As discussed above, Smallegan's apparatus does not use

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electrical power and, thus, does not include electrical connectors. Smallegan fails to disclose an electrical connector at all, much less, a feed head, wherein the delivery tube and electrical connector are integrated. Therefore, Smallegan fails to teach or suggest all the features recited by claim 6.

Goodsmith fails to remedy the deficiencies of Smallegan. Goodsmith appears to disclose an installation head. The installation head includes a proximity switch 68 which is connected by electric line 80 to a quick-connect coupling 82, which is connected to a coupling 84 mounted on the upper die shoe 24. The coupling 84 is then connected to the control panel 86 (See Goodsmith at Fig. 1). Therefore, as shown in Fig. 1, the electrical coupling 84 is connected to the installation head.

In contrast, claim 6 recites a feed head, wherein the delivery tube and electrical connector are integrated. An electrical coupling connected to the installation head is not the same as a feed head, wherein the delivery tube and electrical connector are integrated. Therefore, Goodsmith also fails to disclose, teach, or suggest all the features recited by claim 6.

Accordingly, even if Smallegan and Goodsmith were properly combinable (which they are not), the combination would still fail to teach or suggest all of the features recited by claim 6. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection.

New claims 7-8

Claim 7 recites a cam being accessible from another end of the feed head distal of the pressing station and manually rotatable by means of a tool engageable with the cam by an operator. The Office Action acknowledges that Smallegan fails to disclose a

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cam (See Office Action, page 3). In addition, as discussed above, Smallegan merely discloses manually actuating each stage of a pierce nut installation apparatus. However, manually actuating each stage is not the same as a cam being accessible from another end of the feed head distal of the pressing station and manually rotatable by means of a tool engageable with the cam by an operator, as recited by claim 7. Therefore, Smallegan fails to disclose, teach, or suggest at least this feature of claim 7. Accordingly, claim 7 is patentable over Smallegan.

Claim 8 recites a delivery tube outlet end and a second electrical connector which are integrated for an operator to simultaneously couple the delivery tube outlet and the second electrical connector with the delivery path inlet end and the first electrical connector respectively. As discussed above, neither Smallegan nor Goodsmith teach or suggest an electrical connector integrated with a delivery tube, as recited by claim 8. Therefore, even if properly combinable (which they are not), Smallegan and Goodsmith would still fail to teach or suggest at least this feature of claim 8. Accordingly, claim 8 is patentable over Smallegan and Goodsmith.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Attached hereto is a marked-up version of the changes made to the claims by this amendment. The attached Appendix is captioned "**Version with markings to show changes made.**" Deletions appear as normal text surrounded by [] and additions appear as underlined text.

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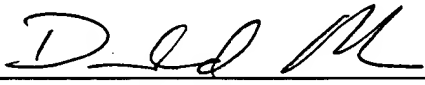
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Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: April 9, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning at page 3, line 12 has been amended as follows:

--Referring to figure 1, a feed head 2 has a pressing die 4 which is shown in its uppermost position. The pressing die [2] 4 reciprocates in a stationary feed head body 6. The pressing die [2] 4 has a peripheral flange at its upper end held between a collar 8 and a cover plate 10. A hollow cylinder 12 is also held by a flange 13 at its upper end between the cover plate 10 and collar 8. A spring 14 urges the cylinder 12 upwards, and hence the cover plate 10, collar 8 and pressing die 4. A press (not shown) presses down on the cover plate 10 to urge the die 4 downwards against the force of the spring 14.--

IN THE CLAIMS:

Claims 1 and 2 have been amended as follows:

1. (Once Amended) A feed head [having] comprising: a pressing station; and a delivery path along which nuts are fed to [a] the pressing station in the feed head, the pressing station [having] including a pressing die which is reciprocated transversely to the delivery path under the action of a press to fasten [a] said nut to a sheet metal member, wherein means is provided to manually reciprocate the pressing die [manually] independently of the press.

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2. (Once Amended) A feed head as claimed in claim 1, wherein the means for reciprocating the die manually is a cam which bears on a surface coupled to the die, and is manually rotated to move the die against the force of a return spring.

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